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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,879	09/19/2001	Kelyn Anne Arora	8293R	1449

27752 7590 10/22/2003

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EXAMINER

TORRES VELAZQUEZ, NORCA LIZ

ART UNIT	PAPER NUMBER
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1771

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DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/955,879

Applicant(s)

ARORA ET AL.

Examiner

Norca L. Torres-Velazquez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Applicant's arguments filed on June 26, 2003 have been fully considered but they are not persuasive.

a. It is noted that there was an error in the numbering of the claims, there was no claim #5. After renumbering the claims, there are claims 1-11 and claim 6 [former claim 7] has been canceled.

b. The rejection of claim 7 under 35 U.S.C. 112, second paragraph, has been withdrawn in view of the cancellation of the claim.

c. Applicants argue that the amended claim 1 to recite that the soft fibrous material is made from a single layer nonwoven web and that the Kirby et al. reference relates to a two layer cover. Applicants also argue that there is no teaching of fuzz removal and/or consolidation area in the Kirby et al. reference. Applicants also argue that the Brock reference teaches a matt attached to a nonwoven web versus a single layer and that there is no teaching of softness (i.e. bending rigidity).

It is noted that the "made from" language used is open language that does not preclude the inclusion of other layers or materials. Therefore, the nonwoven material taught by the combination of Kirby et al. and Brock et al. would read on the claim. Further, it is the Examiner's position that the Kirby et al. provides the material presently claimed with the property of softness in terms of bending rigidity and Brock et al. provides the teaching of consolidation and teaches how fuzz is removed from their invention. Further, since the teachings of the references provide for the structure and materials claimed herein, it is the Examiner's position that the combination of the high

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bond area, fuzz removal and softness, are inherent to a nonwoven produced as taught by the Kirby et al. and Brock et al. references. Otherwise, Applicant should show results that will shown differently.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIRBY et al. (US 5,533,991) in view of BROCK et al. (US 4,041,203).

KIRBY et al. discloses a bodyside cover for an absorbent article that provides a soft and comfortable surface adjacent to the wearer's skin. (Column 1, lines 11-16)

The reference discloses a bicomponent cover 12 that is constructed of two different materials 26 and 30. The first material 26 contains a plurality of apertures 28 formed therethrough, it can be an extrusion-coated nonwoven or a net material that has opening between the strands or threads due because of its construction. (Column 5, lines 21-28)

The second material 30 of the bicomponent cover 12 is preferably a liquid-permeable nonwoven web. The nonwoven web can be a fibrous material formed from fusible polymeric fibers or filaments. The nonwoven web is nonperforated, although a perforated web can be used if desired. The reference teaches the use of polyolefins to form the nonwoven web. Suitable materials include polypropylene spunbond and bonded carded webs. An appropriate nonwoven web material should have a uniform web with a denier of about 1.5 or greater. The reference

further teaches that the second material 30 can be bonded to the first material 26 by thermal bonding. (Column 7, lines 17-38)

The KIRBY et al. reference shows on data that indicates that significant differences in softness existed between the first and second materials. For all of the tests except the test for the second material, "Thickness Loss During Compression," a lower value was obtained indicating a softer material. For example, in the test for "Bending Rigidity", the 0.002 value for the second material is much lower than the 0.028 value obtained for the first material. This means that the second material (the nonwoven) is less rigid than the first material (the thermoplastic film). For the "Thickness Loss During Compression" test, a higher value indicates a more compressible and, thereby, softer material. In Table 5, the 45.77 value for the second material is higher than the 13.17 value obtained for the first material, and therefore the second material is more compressible. (Column 10, lines 35-47).

The reference teaches that the second material could be a spunbond web, which by definition have the filaments bonded by methods such as hot-roll calendering and consolidation of a significant area is expected. (Refer Dictionary of Fiber & Textile Technology, 7<sup>th</sup> edition, page 184). However, the reference does not explicitly disclose that the nonwoven web has a consolidation are of at least about 30% or at least 40%.

BROCK et al. (US 4,041,203) discloses nonwoven fabrics for use in applications such as garments, wipes, and the like. (Column 1, lines 36-43) The reference teaches the use of bonding in their invention has a two-fold effect of achieving ply attachment between the mat and web and of integrating the continuous filament web into a coherent, strong constituent so that the resulting material has desirable strength characteristics. (Column 4, lines 43-48) It also teaches that the

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pattern of the raised points on the roll 44 is selected such that the area of the web occupied by the bonds after passage through the nip is about 5-50% of the surface area of the material with the discrete bonds being present in about 50-1000/in<sup>2</sup>. (Column 4, lines 35-40)

BROCK et al. further discloses that the material exhibits surprisingly good abrasion resistance in that the surfaces do not tend to get fuzzy or raise a pile during use. With respect to the continuous filament web side, the abrasion resistance obtained is believed to be attributable to the fact that the filaments are strongly held within the discrete bond areas without breakage thus avoiding the presence of long filament spans which would tend to "fuzz-up" during use. (Column 7, lines 50-58)

With regards to the claimed fuzz removal value, it is noted that both do not show test results providing the Examiner with values that would compare with

It is noted that KIRBY et al. is silent with respect to the claimed fuzz removal value. However, it is reasonable to presume that the claimed fuzz removal value is inherent to the invention of KIRBY et al. Support for said presumption is found in the use of the same starting materials (i.e. fibrous nonwoven web of thermoplastic materials), like processes of making the articles (i.e., thermal bonding), and the production of similar end-products (i.e., materials that provide a soft and comfortable surface adjacent to the wearer's skin). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the presently claimed function of "fuzziness" would obviously have been provided as a result of the inventive nonwoven web with 5-50% bonding area that has good abrasion resistance in that the surfaces do not tend to get fuzzy or raise pile during use of the BROCK et al. reference. *Note In re Best*, 195 USPQ 433.

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Since both KIRBY et al. and BROCK et al. from the same field of endeavor, nonwoven fabrics with fabric-like characteristics, the purpose disclosed by BROCK et al. would have been recognized in the pertinent art of KIRBY et al.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the nonwoven web and provide it with a bonding ("consolidation") area of 5-50% with the motivation of holding the filaments within the discrete bond areas without breakage and avoiding "fuzz-up" during use as disclosed by BROCK et al. (Column 7, lines 50-58).

4. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over KIRBY et al. and BROCK et al as applied to claims 1-8 above, and further in view of SAYOVITZ et al. (US 6,093,665).

KIRBY et al. and BROCK et al. fail to teach the use of bicomponent fibers.

SAYOVITZ et al. discloses a process for producing bonded nonwoven fabrics. The reference teaches that the bonded regions cover from about 3% to about 50% of the surface of the nonwoven web. (Column 1, lines 5-45) The reference further teaches that the nonwoven webs of their invention are any known nonwoven webs that are amenable to pattern bonding, which include, but are not limited to, fiber webs fabricated from staple fibers, continuous fibers or mixtures thereof, and the fibers may be natural, synthetic or mixtures thereof. In addition, suitable fibers may be crimped or uncrimped, and synthetic fibers may be monocomponent fibers or multicomponent conjugate fibers, e.g. bicomponent side-by-side or sheath-core fibers. The reference further teaches the use of synthetic fibers produced from synthetic thermoplastic polymers such as polyethylene and polypropylene. (Column 3, lines 23-58).

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the nonwoven web and provide it with bicomponent fibers with the motivation of producing a nonwoven web that is amenable to pattern bonding and that will have useful properties such as surface abrasion resistance, web strength and dimensional stability as disclosed by SAYOVITZ et al. (Column 1, lines 63-67 through Column 2, lines 1-2).

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Norca L. Torres-Velazquez whose telephone number is 703-306-5714. The examiner can normally be reached on Monday-Thursday 8:00-4:00 pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

NLT

October 20, 2003

  
ELIZABETH M. COLE  
PRIMARY EXAMINER